

IN THE CLAIMS

The following is a complete listing of the claims in the application including the present status thereof and including any amendments made by this paper. By this paper, claims 65 and 66 have been amended.

Listing of claims:

1-51(canceled).

52(previously presented). An electrical cardiac stimulation system as in claim 65 wherein the electrical stimulus conducts electrically between an atrial tip electrode and the housing.

53(previously presented). An electrical cardiac stimulation system as in claim 65 wherein the electrical stimulus conducts electrically between a ventricular tip electrode and the housing.

54-55(canceled).

56(previously presented). An electrical cardiac stimulation system as in claim 66 wherein the signal associated with the evoked response is sensed between an atrial ring electrode and a ventricular electrode.

57(previously presented). An electrical cardiac stimulation system as in claim 66 wherein the electrical stimulus conducts electrically between an atrial tip electrode and the housing.

58(previously presented). An electrical cardiac

stimulation system as in claim 66 wherein the electrical stimulus conducts electrically between a ventricular tip electrode and the housing.

59(previously presented). An electrical cardiac stimulation system as in claim 65 wherein the signal associated with the evoked response can be selectively sensed between any one of an atrial ring electrode to ventricular ring electrode, atrial ring electrode to can electrode, atrial ring electrode to ventricle coil electrode, atrial ring electrode to superior vena cava coil electrode, atrial tip electrode to ventricular coil electrode, atrial tip electrode to ventricular tip electrode, atrial tip electrode to atrial ring electrode, superior vena cava coil electrode to atrial tip electrode, superior vena cava coil electrode to ventricular coil electrode, superior vena cava coil electrode to ventricular tip electrode, ventricular tip electrode to ventricular coil electrode, superior vena cava coil electrode to ventricular ring electrode, and ventricular ring electrode to ventricular coil electrode.

60-63(canceled).

64(previously presented). A method of automatically determining whether an electrical stimulus evokes a response in the heart when the stimulus is applied by a cardiac electrical stimulation system having atrial and ventricular leads, a pulse generator, and a sensing circuit, said method comprising the steps of:

- (a) providing an electrical stimulus to at least one of an atrium or ventricle of a heart;
- (b) attenuating afterpotential associated with said electrical stimulus;
- (c) sensing an evoked response by the heart to the electrical stimulus, wherein a signal associated with an evoked response from the electrical stimulus is sensed between selected electrodes, including at least one of an atrial electrode and a ventricular electrode of said leads; and
- (d) wherein said atrial lead includes at least one of an atrial tip electrode and an atrial ring electrode, and said ventricular lead includes at least one of a ventricular tip electrode, a ventricular coil electrode, and a ventricular ring electrode.

65(currently amended). An electrical cardiac stimulation system having an autocapture/stimulation/sensing configuration for use with atrial and ventricular leads, said electrical cardiac stimulation system including:

- (a) a selected combination of electrodes, at least one electrode of said combination being selected from groups consisting of atrial electrodes and ventricular electrodes and at least one electrode of said combination optionally being selected from groups consisting of can electrodes and vena cava electrodes;

- (b) a stimulation system enclosed in a housing, said stimulation system being electrically coupled to each said atrial electrode and each said ventricular electrode for providing an electrical stimulus to at least one of an atrium or ventricle of a heart;
- (c) a sensing circuit that senses an evoked response by the heart to the electrical stimulus, wherein a signal associated with an evoked response from the electrical stimulus is sensed between at least two of said electrodes of said combination and when said sensing means is adapted to selectively sense evoked responses between all combinations of any two of said electrodes;
and
- (d) an afterpotential attenuation device for attenuating afterpotentials which result due to the application of the pacing stimulus to the heart by said electrical stimulation system, said afterpotential attenuation device being electrically coupled to said stimulation system;
- (e) an atrial lead including ~~an~~ at least one atrial electrode, said at least one atrial electrode being selected from the group consisting of at least one of atrial tip electrodes and atrial ring electrodes; and
- (f) a ventricular lead including ~~a~~ at least one ventricular electrode, said at least one ventricular electrode

being selected from the group consisting of at least one of ventricular tip electrodes, ventricular coil electrodes, and ventricular ring electrodes.

66(currently amended). An electrical cardiac stimulation system having an autocapture stimulation/sensing configuration for use with atrial and ventricular leads, said electrical cardiac stimulation system including:

- (a) a selected combination of electrodes, at least one electrode of said combination being selected from groups consisting of atrial electrodes and ventricular electrodes and at least one electrode of said combination optionally being selected from groups consisting of can electrodes and vena cava electrodes;
- (b) a stimulation means enclosed in a housing, said stimulation means being electrically coupled to each said atrial electrode and each said ventricular electrode for providing an electrical stimulus to at least one of an atrium or ventricle of a heart;
- (c) a sensing means that senses an evoked response by the heart to the electrical stimulus, wherein a signal associated with an evoked response from the electrical stimulus is sensed between at least two of said electrodes of said combination and when said sensing means is adapted to selectively sense evoked responses between all combinations of any two of said electrodes;

- (d) an afterpotential attenuation means for attenuating afterpotentials which result due to the application of the pacing stimulus to the heart by said electrical stimulation means, said afterpotential attenuation means being electrically coupled to said stimulation means;
- (e) an atrial lead including ~~an~~ at least one atrial electrode, said at least one atrial electrode being selected from the group consisting of at least one of atrial tip electrodes and atrial ring electrodes; and
- (f) a ventricular lead including a at least one ventricular electrode, said at least one ventricular electrode being selected from the group consisting of at least one of ventricular tip electrodes, ventricular coil electrodes, and ventricular ring electrodes.